DOCUMENT RESUME

ED 314 697 CG 022 233

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TITLE Epidemiology of Suicidal Risk in Rural Community Mental Health Systems.
PUB DATE Aug 89
NOTE 23p.; Paper presented at the Annual Meeting of the American Psychological Association (97th, New Orleans, LA, August 11-15, 1989).
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *At Risk Persons; *Community Services; Human Services; Incidence; Intervention; *Mental Disorders; *Mental Health Programs; *Rural Areas; Schizophrenia; *Suicide; Surveys

ABSTRACT

While the popular literature frequently makes mention of the suicide risk of mentally ill persons, few studies have actually focused on the suicide risk of persons under psychiatric treatment. This study collected data regarding the suicidal risk of persons served by rural community mental health centers from records of 181 outpatients and 218 inpatients of a rural community mental health system, using suicide review forms. The findings revealed that 109 of the 181 outpatient records contained data indicating that suicidal risk had been addressed at intake. Suicidal communications were documented in 32 cases and 13 cases clearly communicated a degree of suicidal risk. Compared to the outpatient sample, inpatient data revealed a population more likely to contain persons who threatened, attempted, or seriously considered suicide. Pretreatment and course of treatment data revealed a number of deficiencies that, if not addressed, could place clients and the system at unwarranted risk. Based on the findings, policy and intervention recommendations were offered. Follow-up data showed that feedback to providers had a significant effect on the response of the system to these deficiencies. (TE)

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EPIDEMIOLOGY OF SUICIDAL RISK IN RURAL COMMUNITY MENTAL HEALTH SYSTEMS

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Running Head: Suicidal Risk

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ABSTRACT

Data regarding the suicidal risk of persons served by rural community mental health centers is notably absent in the literature. This study addresses this deficiency. Records of 181 outpatients and 218 inpatients of a rural community mental health system were examined using suicide review forms. Pretreatment and course of treatment data revealed a number of deficiencies that, if not addressed, could place clients and the system at unwarranted risk. Based on the findings, policy and intervention recommendations were offered. Follow-up data showed that feedback to providers had a significant impact on system response.

EPIDEMIOLOGY OF SUICIDAL RISK IN RURAL COMMUNITY MENTAL HEALTH SYSTEMS

The popular literature and numerous secondary sources make frequent mention of the suicidal risk of mentally ill persons. In the vast majority of circumstances the citations these publications provide, if references are given at all, are to retrospective analyses of the treatment history or prior mental status of persons who had completed suicide. As late as 1965 fewer than a dozen studies focused specifically on the suicide risk of persons under psychiatric treatment appeared in the primary literature (Banen, 1954; Chapman, 1965; Sletten, Brown, Evenson, and Altman, 1972). While the intervening years have brought an improvement in this situation in regard to persons receiving inpatient services (Pokorny, 1983), the literature remains deficient in the realm of information concerning suicidal risk of persons receiving services from community mental health centers. This is particularly true when the population of interest is persons served by rural community mental health programs.

The following study was designed to provide information concerning the epidemiology and phenomenology of suicidal episodes of clients admitted to rural mental health programs. Furthermore, we were interested in the prior treatment history of clients at identified suicide risk, the system's responses to clients' suicidal communications, changes in the frequency of suicidal communications during the course of treatment, and possible differences in status characteristics and treatment between persons at identified suicide risk and other clients.

Mental health providers cannot afford to be misinformed concerning the suicide risk of persons receiving services. With the growing movement toward provider accountability, it is imperative that appropriate and effective services be offered to clients at suicide risk. If clients become dissatisfied with services, their suicide risk will significantly rise (Richman and Charles, 1976), and in the event of such a treatment failure, the provider or system may be held professionally or legally accountable (Bailey and Ray, 1981; Berman and Cohen-Sandler, 1982; Goldberg, 1987).

As a first step toward avoiding such adverse outcomes we must become informed concerning the epidemiology of suicide risk and

associated patient characteristics. Furthermore, an analysis of system responses to persons at identified risk should provide us information that can be translated into policy recommendations that will reduce provider liability and increase service effectiveness. The following study was undertaken to provide a data base to enable this process.

METHOD

Subjects

The subject population consisted of 181 persons who were clients at one of three outpatient clinics and 218 patients from a psychiatric inpatient unit of a regionalized rural mental health system. The outpatient sample consisted of 103 (57%) females and 78 (43%) males. The ages of the clients ranged from 8 to 91 years; the majority (51%) were between 30 and 56 years old (Median age = 42). The inpatient sample consisted of 127 (58%) females and 91 (42%) males. The ages of the patients ranged from 18 to 82 years; the majority were between 30 and 50 years (Median age = 37).

Instruments

The records were reviewed using one of three survey instruments. The three instruments were similar in design and focus, but differed in comprehensiveness. What follows is a description of the instrument used in the review of outpatient records (Suicide Review Form OPC).

The first part of the survey instrument consisted of a section where the treatment history of each client was documented. Information such as the time period of services received, the number of admissions to inpatient service prior to the current treatment episode, and if appropriate, the date the client's case was terminated were recorded in this section.

This was followed by a section in which the age, sex, diagnosis, and level of adaptive functioning were documented. After that came a section which focused on the client's service history at the facility in which his or her record was reviewed. In this section, information such as the number and length of visits to the facility, the degree status of those who provided services the client, and the client's most recent medication type were ascertained.

The final section documented the client's suicidal communications and behaviors, and the resulting system responses to these communications. Suicidal communications and behaviors were investigated as they were addressed throughout the case histories. However, particular emphasis was focused on intake, the first two months following intake, and the midpoint of treatment for inactive cases or the most recent two months of service for active cases. For the preceding time probes attempts were made to determine the type of system and treatment provider responses to suicidal communication as well as the effects of these responses on the clients. This was done by objective ratings and subjective evaluation of each documentation of suicidal thinking or behavior as it appeared at these points in the case record.

Inpatient records were reviewed using one of two instruments. Suicide Review Form A was an abbreviated instrument that provided documentation concerning length of stay, patient demographic characteristics, diagnosis, and the use of suicide precautions. Suicide Review Form B was a more comprehensive instrument that in addition to the preceding information provided data on prior treatment history,

pre-screening, first documentation of inquiry into suicidal risk - this section also provided data concerning the patient and system response to the inquiry, suicide attempts and threats while on inpatient status, suicide attempts and threats prior to admission, and sixth day, mid-treatment and last two days time probes that provided additional data concerning suicide risk.

Procedure

All client records were selected by random sampling procedures. The researchers obtained administrative and demographic information from each record, and then completed the proper Suicide Review Form which surveyed the service history of the client. All 181 outpatient records were reviewed using Suicide Review Form OPC.

Of the 218 inpatient records reviewed 177 were first examined using Suicide Review Form A. Of these 177 records 30 were randomly chosen to be further investigated via Suicide Review Form B. Following completion of this phase of the investigation preliminary data analyses were run on the inpatient data and the findings were discussed with the hospital staff with an emphasis on policy recommendations and

assessment alternatives. After the hospital staff had been provided feedback concerning the results of the initial case record reviews a data set of 41 records were drawn as a follow-up sample. These records were of patients who had received service subsequent to the feedback sessions. After the follow-up surveys were completed, data from the initial and follow-up phases of the study were analyzed through parametric and non-parametric statistics.

RESULTS

Outpatient Data

One hundred and eighty-one outpatient records were reviewed. One hundred and nine (60%) of the records contained data that indicated that suicidal risk had been addressed at intake. Using the data from intake and the first two months of service 9 of the clients (5%) were shown to be at suicidal risk (recent attempts or serious threats). Using the mid-treatment (inactive clients) and last two months of service (active clients) documentation was provided indicating 6 (3%) of the clients were at suicidal risk. Throughout the course of treatment, including intake, suicidal communications were documented in 32 of the

clients' records. Of these 32 clients, it was found that 13 of them had clearly communicated a degree of suicidal risk. These communications included suicide attempt(s) or repeated threats of suicide during the course of therapy. For the subsequent data analysis, these individuals were classified as at risk for suicidal behavior. Of this group of 13, documentation indicated that 7 of them had made a suicide attempt within the last year. It was found that 10 of the 13 persons identified as at risk had at least one prior treatment admission for mental health services. These admissions included Mental Health/Mental Retardation Centers (MHMR), state hospitals and/or private practitioners. However, the number of admissions was no higher than the number of prior admissions experienced by other clinic clients, X^2 (1, N=171)=.10, p-NS. There were no significant differences in the sex ratios of clients at suicidal risk compared the clinic's general client population, X^2 (1, N=180)=.10, p-NS. Of the people who were classified as at risk for suicidal behavior, eight were females and five were males. Of the seven who had made a suicide attempt within the last year, six were females and one was male. In regards to marital status, for those in the

overall risk category, five were single, five were married, two were divorced, and one was separated.

In regard to the treatment which clients received once admitted to a program, the following results were found. Overall, eighty-six percent of the clients whose records were sampled were receiving psychotropic medication. Of those categorized as at risk, ten were receiving medication and three were not. Individuals with documented suicide risk in the case record (includes the seven attempters as well) were seen for no more appointments per month than persons not at identified risk ($t=1.04$ p-NS, $df=144$), nor were there any systematic increases in scheduled appointment frequency in the month that followed their initial identification as at suicide risk (data was inadequate in quantity to make statistical comparisons). There were, however, differences in the length of appointments of persons at identifiable risk and other clients ($t=3.08$ $p>.01$, $df=145$). Data was inadequate in both quantity and quality to make comparisons regarding changes in the length of appointments in the month that followed suicidal communications by clients.

Finally, there was no significant difference in level of adaptive functioning for those classified at risk as judged by the intake worker on either of two separate measures (DSM III- t=-.61 p-NS, df=93 or LOF t=.91 p-NS, df=114). Nor were there any significant difference in the diagnoses of at risk patients and those in the general clinic population (t=-.38 p-NS, df=175).

Inpatient Data

Of the 218 inpatient records reviewed 177 were drawn as the initial sample and 41 were part of a follow-up sample. From the initial sample of 177 a sub-sample of 30 records were randomly chosen for more comprehensive and time sampling reviews.

For the sub-sample of 30 records, the data showed that over 80% of the patients came to the hospital with inadequate pre-screening information regarding suicidal risk- no pre-screening information (30%), pre-screening information that failed to address suicide risk (44%), or pre-screening information that inadequately documented suicide risk (10%). Following initial unit assessments 47% of the clients were shown to have a suicidal risk history with half (8) of this group being placed on immediate suicidal precautions. The psychiatrist was the

provider most likely to address suicide as well as being the provider most likely to uncover suicidal risk. Using sixth working day and mid-treatment probes it was revealed that, of the patients at this point in treatment, approximately 20% of them were on suicide precautions, and typically one or two patients were communicating, via threat or behavior, acute suicidal risk. Neither frequency comparisons or statistical analyses revealed any differences in the status characteristics or treatment of persons in the sub-sample versus those in the larger initial sample.

Significant findings were obtained in comparing the follow-up data to the information collected in the initial sample. The follow-up data showed a significant increase in the probability that a given patient would be placed on suicide precautions (X^2 (1, N=218)=35.72, p>.01), and the percentage of their stay spent on precautions once assigned that status (F (1,63)=8.24; p>.01). In both instances, the follow-up data was congruent with a higher probability of being placed on precautions (68% of the patients in the follow-up sample versus 21% in the initial sample), and the percentage of stay that they were on precautions once assigned that status (96% for the follow-up patients versus 79% for

patients in the initial sample). Other comparisons relating to age, sex, and race showed no differences between the two samples.

DISCUSSION

Chronic undifferentiated schizophrenia and chronic paranoid schizophrenia were the most frequent diagnoses represented among the records sampled. There were no apparent differences when comparing the diagnoses of persons identified at suicide risk to other clients receiving mental health services. This was not surprising in light of the fact that the literature generally presents persons with a schizophrenic diagnosis as having increased risk for suicide compared to most other diagnoses. Furthermore, schizophrenia is the diagnostic group which accounts for most completed suicides (Berman, 1975; Levy and Southcombe, 1953).

In the outpatient sample of 181 clients, 32 individuals made suicidal communications which were documented at intake and/or later in the case records. This number is probably an underestimate of the number of clients who had considered, threatened, or attempted suicide since the communications documented were only those judged by the service providers to be serious or persistent (recurrent) enough to be recorded.

Implied in this is that casual references to suicide, communications judged by providers to be exclusively manipulative, or those which were thought to be too far in the past to be of importance went unrecorded. The reasons given by clients for their suicidal thoughts were varied, but the most commonly mentioned reasons for suicidal thoughts and behaviors were personal/emotional and family problems.

Thirteen (7%) of the outpatient clients in this study were classified, based on information available in the case record, as "at risk" for suicide by the researchers. These were clients who had made repeated threats of suicide or those who had actually attempted suicide during their admission to the outpatient facilities. This number included seven (4%) of the clients who had attempted suicide within the last year. These percentages are higher than those of normal populations documented by Shneidman and Farberow (1961), and they are lower than those of inpatient populations (Neuringer,1974).

Although the numbers of male (5) and female (8) outpatient clients who were classified as being at risk for suicide were similar, females were more likely to have attempted suicide within the last year than males (6:1). This finding corresponds to the suicide attempt rates in the

general population, where females are known to attempt suicide more frequently than males (Whitehead, Johnson, and Ferrence, 1973). Still, the proportion of female attempters was higher than that generally cited in the literature. This finding requires further investigation to determine if it was the result of the small sample of attempters included in the present study or if it reflects true population differences. If the latter is true then the current literature can be seen as generally under estimating the attempt ratios of female to male mental health clients.

No differences according to marital status were found between those outpatient clients classified as being at suicide risk and other clients receiving services from this mental health system. Regardless of their risk status, the center clients had a higher probability of being in a single or divorced marital status and a lower probability of being currently married and living with their spouse, as compared to the general population from which the clinic clients were drawn.

Seventy-two percent of the outpatient "at risk" clients had at least one previous admission to a mental health facility, which demonstrates that most clients in this category had prior problems in adjustment or functioning. However, it must be kept in mind that the number of prior

admissions was no higher for the at risk group than the general client population. Levels of adaptive functioning among the at risk clients were similar to those of the overall sample. Illustrating that there were few pre-admission stress-adjustment differences as measured by these instruments or prior admissions between those clients who thought of or attempted suicide and those who did not.

With regard to treatment considerations, the clients identified as at suicide risk were not seen more frequently. However, once at the clinic their appointments were for slightly longer periods of time than other clients. Perhaps most troubling was that in the outpatient sample, it appeared that once suicide risk was documented in a client's record, very little further information was recorded about ongoing responses of the system to that risk. While the system can identify suicide risk, little mention of treatments or outcomes is provided in client records, and therefore new providers who are unacquainted with the clients have little reliable information about their suicide risk or past interventions directed toward alleviating that risk. This may result in delays and mistakes in service provision, and generally creates a dangerous situation for the treatment of suicidal clients.

The inpatient data revealed a population more likely to contain persons who threatened, attempted, or seriously considered suicide as compared to the outpatient sample. As with the outpatients, threats of suicide and suicidal risk appears to markedly diminish as treatment progresses (see time probe data in the results section).

The follow-up data, which was obtained subsequent to providing the staff of the inpatient unit feedback, revealed a major change in the utilization of suicide precautions. While additional factors were at play there is no doubt that the data and feedback provided had a significant effect on the probability that suicide precautions would be used. In part, this treatment change was dictated by the inadequate pre-screening information that the unit was forced to deal with. The study highlighted this deficiency and as a result providers became more conservative in their approach to client management. Obviously, a next step to this research project will be to address the deficiencies in the pre-screening process that occurs prior to intake on the inpatient unit.

CONCLUSIONS

From the information which became available as a result of this study we learned that there are few status and/or socio-demographic

differences between suicidal or "at risk" clients and those who are not. For the outpatients there were also few differences in the treatment these two groups receive. Acutely at risk clients received more direct service provider time, but in most instances, appointments were for less than 30 minutes.

The medical professionals were the providers most likely to document suicidal thoughts and behaviors. Progress notes from other types of providers, that referenced suicide risk, were infrequent and lacked detail by comparison to those of medical personnel. In the outpatient sample, not only were descriptions of acute episodes of risk often inadequate, but subsequent appointments seldom documented any follow-up concerning the resolution or continuance of the client's risk. Again, psychiatrists did a better job of addressing this problem, but far too frequently their progress notes failed to mention any degree of follow-up. This was not true in regard to the inpatient data; however, even here there were instances where follow-up documentation could have been improved.

Future research suggested by this study might proceed in several directions. One approach would involve interviews with staff and clients

to obtain information against which that present in the records might be evaluated for accuracy and completeness. Alternatively, clients who are known to be suicidal might be interviewed along the same dimensions as this study, but independently of the information present in their records. Finally, a new system of documentation based upon information from any of the above methodologies might be developed in order to upgrade both the services provided to the clients and the records relating to those services.

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